ABSTRACT

A device and method for calibrating linear velocity and track pitch for an optical disc is disclosed. The device comprises a frequency divider, a synchronous bit-clock generator, a counter and a linear velocity and track pitch calculator. The frequency divider receives a motor frequency generator (FG) pulse and generates a motor rotation period signal (FG/X). The synchronous bit-clock generator generates a high frequency bit-clock according to a reproduced signal read from disc. The bit counter counts the pulse of the bit-clock for each period of the motor rotation period signal to generate the data amount M. The linear velocity and track pitch calculator calculates the linear velocity by a linear velocity function with the information of the data amount M and the motor rotation period. Then, the linear velocity and track pitch calculator calculates the track pitch by a pitch function with the information of the data amount, radius and linear velocity at different tracks.